

Work Order ID 76350

November-09-11 10:53:30 AM

76350

Page 1

Item ID: D412-664-203

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Crosstube Aft

Start Date: 09/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 29/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: M.L.J Date: 11/11/09 Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D412-664-243

E/DEO

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels as per PPP D412-664-203 CHG 008

110

0.00

110

Packaging

Packaging

Memo

0.00

Packaging

120

0.00

120

BENDING MACHINE - CROSSTUBES

CNC Bend 2

Memo

0.00

CNC Alpha 160 Bender

Bend tube as per Dwg D412-664-243 using CNC bender program 412-aft and Folio FT010

D412 664 203 B 76350

11-12-06 (1)
for M.L.J 11-12-6
(1)

JW/
mo

11-11-21

JW/
mo

11-11-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D42-664-203 PAR #: Fault Category: X-tube Landing Gear NCR: Yes ☒ No ☐ DQA: Date: 11/12/08
 Resolution: use as is Disposition: Good as is QA: N/C Closed: Date: 11/12/08

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11.11.23	120	CRUSHING IS OVER 6% RL POREDS	CP 11.11.23 BS/042	Acceptable based on comparison with center of tube. See attached SR & BS email	M/A	S 11/11/23	CP 11.11.23 BS/042	S 11/11/23

NOTE: Date & initial all entries

Work Order ID 76350

76350

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November-09-11 10:53:30 AM

Item ID: D412-664-203 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Aft
 Start Date: 09/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 29/11/2011 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC15- Crosstube Dimensional Check	0.00							
130									
QC	Memo	0.00							
Quality Control									
140	Crosstubes	0.00							
140									
Crosstubes	Memo	0.00							
Crosstubes	1-Drill pilot holes in tube as per Dwg D412-664-243 using drill Jig DT8550 & DT8551 and drill table DT8577 using #9 holes as per QSI 10 to install towers.								
	2-Ream hole to finish size in tube as per Dwg D412-664-243 using drill Jig DT8550 & DT8551. Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes.								
	3-SCRIBE PART # & BATCH #								
	4-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D412-664-243								

Sulu123

DI 12-11-24

TW 11-11-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Quality Control

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Item ID: D412-664-203 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Aft
 Start Date: 09/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 29/11/2011 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* Outsource2	Outsource process - NDT per QSI038 4.1	0.00							<u>CL 11/14/28</u> (1)
	Memo Liquid Penetrant Inspection as per QSI 038Or. Issue P/O: <u>15546</u> LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order	0.00							
190 *190* Packaging	Packaging	0.00							<u>P 11/14/28</u> (1)
	Memo Inspect for transit damage Ensure copy of NDT results attached to work order.	0.00							
200 *200* QC	QC5- Inspect part completeness to step on W/O	0.00							<u>BT 11-11-28</u>
	Memo Inspect for damage & ensure results are as per Dwg D412-664-203	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Revision ID:

Stop ***NS2***

Item Name: Crosstube Aft

Start Date: 09/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 29/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

210

0.00

210

SprayPaint

0.00

SprayPaint

Memo

Spray Painting

Mask underside of crosstube as shown

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per DEO D412-664-243 and QSI 005 4.2

PRIME:

Start Time: 11:00

Finish Time: 12:40

PAINT:

Start Time: 4:00

Finish Time: 5:00

21 11 - 11 - 30 (21)

220

QC14- Inspect Spray Paint

0.00

220

QC

Memo

0.00

Quality Control

Then, Wrap in plastic bag to protect from scratches

22 11 - 12 - 01 (22)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 76350

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November-09-11 10:53:30 AM

Item ID: D412-664-203 Accept ***N900040100*** Setup Start ***NS1***
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 Item Name: Crosstube Aft
 Start Date: 09/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 29/11/2011 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230		0.00							
230	Crosstubes								
Crosstubes	Memo	0.00							
Crosstubes	Assemble as per Dwg D412-664-203								
	1- Install chafing shield as per DEO D412-664-243. Top holes should be facing up.								
	A/R Proseal 890 Batch: 119396								
	EXP: 05/12								
	2- Lightly scuff the bonded area using a 320 grit sand paper and clean the area with 41058 wash 'n' wipe								
	3-Install support with Scotch-Weld DP460 and install clamps as per DEO Dwg D12-664-243 using installaiton jig DT9024. Torque clamps as per dwg								
	A/R Scotch-Weld DP460 Batch: 119341								
	EXP: 04/21/2012								
	Torque: 11.12.06								
240	QC5- Inspect part completeness to step on W/O	0.00							
240									
QC	Memo	0.00							
Quality Control									

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76350

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November-09-11 10:53:30 AM

Item ID: D412-664-203 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Aft

Start Date: 09/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 29/11/2011 Req'd Qty: 1.00 ***1*** Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	Pick Kit	0.00							
250									
Packaging	Memo	0.00							<i>Supp/c @</i>
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
260									
QC	Memo	0.00							<i>Sumlue</i>
Quality Control									
270	Packaging	0.00							
270									
Packaging	Memo	0.00							<i>Sp 11-12-06</i>
Packaging	Identify and pack for shipping as per PPP D412-664-203								
	*****Ensure tube is not packaged if curing time is less than 12 hrs, see step 27								
	for application time & date *****								
	Time & date of packaging: _____								
	Location: <u>103</u> <i>Rev J</i>								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76350***76350***

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November-09-11 10:53:30 AM

Item ID: D412-664-203

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Crosstube Aft

Start Date: 09/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 29/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.00							
Quality Control									

NF
11-12-06

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November-09-11 10:53:35 AM

Page 1

Work Order ID: 76350

76350

Parent Item: D412-664-203

D412-664-203

Parent Item Name: Crosstube Aft

Start Date: 09/11/2011

Required Date: 29/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:E04.02.16Reformat; Added D3189-1K/DS
 IPP Rev:F 06-03-29 Remove Coments on Pick List JLM
 IPP Rev:G 06.12.08 per ECN 886 EC
 IPP Rev:H 07-04-30 As per Rev D JLM
 IPP Rev:I 08-06-12 add comment in seq. 21 DD verified by:EC IPP rev J
 11.04.21 DEO D412-664-243-E-1 EC verified DD IPP REV:K
 11.10.03 DEO D412-664-243-E-2 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D412-664-203TRN

Manufactured No

110

Each

2.0000

1

1

**

JW 11-11-21

D412-664-203TRN

Crosstube Turning Detail

Location

Loc Qty

Loc Code

FG

1

76106

1

LG

1

75784

1

D2896-1

Manufactured No

230

Each

37.0000

1

1

**

11.12.05

D2896-1

Support

Location

Loc Qty

Loc Code

LG

16

71502

16

LG052

21

74465

21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Picklist Print

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November-09-11 10:53:35 AM

Work Order ID: 76350

76350

Parent Item: D412-664-203

D412-664-203

Parent Item Name: Crosstube Aft

Start Date: 09/11/2011

Required Date: 29/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3189-1

Manufactured No

230

Each

28.0000

2

2

D3189-1

Chafing Shield

**

11.12.05

LocationLoc QtyLoc Code

FG

4

36065

4

LG053

24

73534

24

D3595-063-570

Manufactured No

230

Each

69.0000

2

2

D3595-063-570

RUBBER CUSHION

**

11.12.05

LocationLoc QtyLoc Code

FG

8

37971

1

42243

7

LG

61

71534

61

MS21920-28

Purchased No

230

Each

88.0000

4

4

MS21920-28

Clamp(per MIL-DTL-8783C)

**

11.12.05

LocationLoc QtyLoc Code

FG

5

105884

5

LG050

83

116839

2

118713

4

119285

77

November-09-11 10:53:36 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Picklist Print

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Work Order ID: 76350

76350

Parent Item: D412-664-203

D412-664-203

Parent Item Name: Crosstube Aft

Start Date: 09/11/2011

Required Date: 29/11/2011

Start Qty: 1.00

Required Qty: 1.00

MS21920-30

Purchased

No

230

Each

110.0000

2

2

MS21920-30

clamp(per MIL-DTL-8783C)

**

11-12-05

Location

Loc Qty

Loc Code

LG

50

119529

50

LG050

46

117998

46

LG051

14

111258

14

AN6-40A

Purchased

No

250

Each

77.0000

4

4

AN6-40A

Bolt

**

Location

Loc Qty

Loc Code

ST342

77

117688

1

118422

26

119449

50

AN6-41A

Purchased

No

250

Each

41.0000

2

AN6-41A

Bolt

**

119449

119641

Location

Loc Qty

Loc Code

ST142

16

118451

16

ST342

25

119449

25

AN960JD616

NAS1149D0663J

Purchased

No

250

Each

0.0000

18

18

AN960JD616

Washer

**

119070

11/14/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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76350

Parent Item: D412-664-203

D412-664-203

Parent Item Name: Crosstube Aft

Start Date: 09/11/2011

Required Date: 29/11/2011

Start Qty: 1.00

Required Qty: 1.00

MS21042L6

Purchased

No

250

Each

1,592.000

6

6

**

W 11/12/11

S *MS21042I 6*
Nut

Location

Loc Qty

Loc Code

ST300

592

117677

25

118384

5

118927

48

118968

514

118968

ST518

1000

119075

1000

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

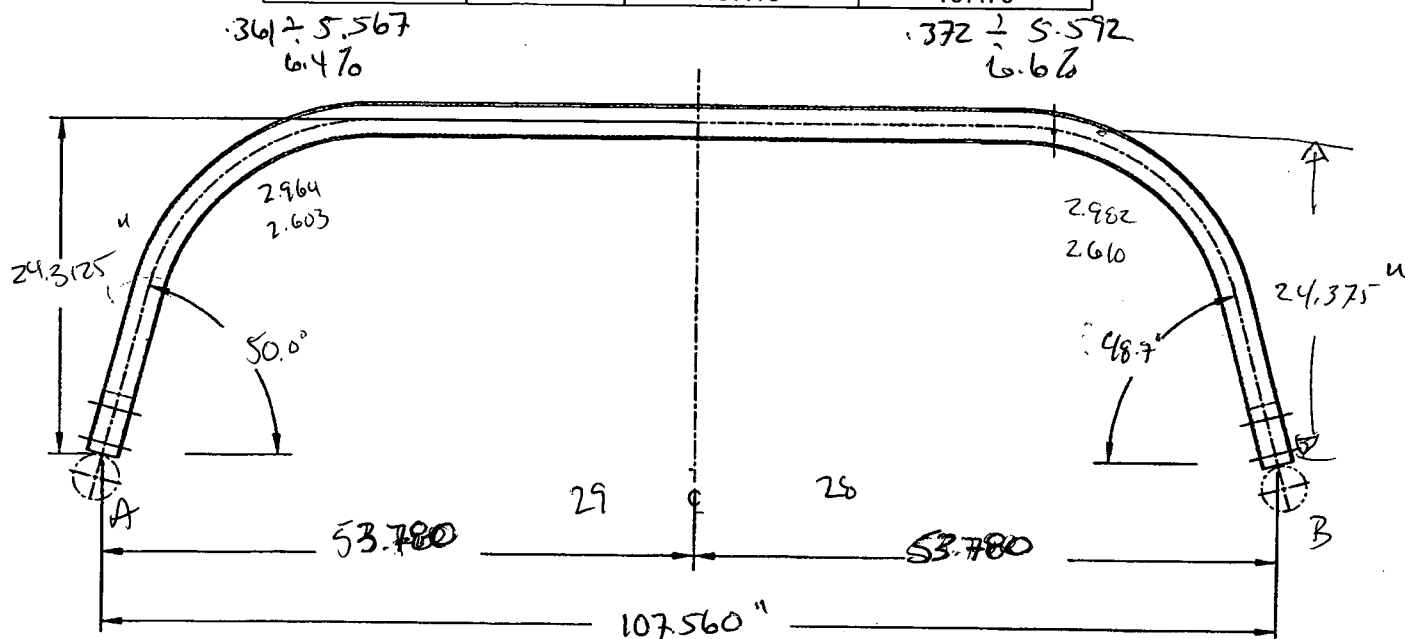
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	76350
Description: Crosstube High Aft (412)		Part Number:	D412-664-203
Inspection Dwg: D412-664-243 Rev: E		Page 1 of 1	

Required Dimension	Min	Max
Height	24.24	24.50
1/2 Span	53.59	53.85
Angle	49	52
Total Span	107.18	107.70



Comments
Size A = 6.470 crushing @ 28 passes
Size B = 6.660 crushing @ 28 passes
Acceptable CP 11.12.23 (PS) 04/2

QC15 Inspection	8
Date	11/11/23

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	07.05.08	Dimensions updated per Dwg rev. D	KJ/JLM	
C	10.02.02	Dwg Rev updated	KJ	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Item	Qty -243	Part Number	Description
1	X	D412-664-243	CROSSTUBE ASSEMBLY (412 HIGH AFT)
2	1	D6009-129	CROSSTUBE
3	2	D3595-063-570	RUBBER CUSHION
4	1	D2896-1	SUPPORT
5	2	D3189-1	CHAFING SHIELD
6	2	D2856-600-1009	ABRASION STRIP
7	4	MS21920-28	CLAMP
8	2	MS21920-30	CLAMP (OR MS21920-32)
9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 76350

GENERAL NOTES:

- MATERIAL: MANUFACTURED FROM D6009-129
FINISHED LENGTH = 124.100±0.020 (BEFORE BENDING/TRIMMING)
- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- IDENTIFICATION: SCRIBE DART PART NUMBER "D412-664-243" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
- WEIGHT: 47.0 lbs (PER IIN-D212-664)
- PART IS SYMMETRIC ABOUT CENTERLINE.
- RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- INSTALL D2896-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2896-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- INSTALL MS21920-30 CLAMPS (OR -32) WITH D3595-063-570 RUBBER CUSHIONS TO SECURE THE D2896-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT.
- INSTALL D2856-600-1009 ABRASION STRIPS WITH A 0.13 REF GAP ON BOTTOM SIDE OF CROSSTUBE PER QSI 035.
- EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY.
- TORQUE CLAMPS 80 TO 100 IN.-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

② DEO ATTACHED

RELEASED
2009-10-29

E	REFORMAT/REVISE GENERAL NOTES; REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS; RELOCATED FLAG #6 PER PAR 08-046 (ZN A6-3); ADD TOLERANCE (ZN B6-3, C4-3, C8-3 & C5-3); MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4.	RF	09.09.30
D	REMOVE D2732-058, CHANGE TO D3595-063-570	PH	07.03.09
C	REMOVE D2856-600-1087, ADD D2732-058 & MAGNOBOND 6398, MS21920-32 WAS MS21920-30	MB	06.10.27
B	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	PH	05.02.04
A	NEW ISSUE	PH	01.10.17
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO.	REV. E
CHECKED	92	D412-664-243	SHEET 1 OF 4
MFQ. APPR.	DS	TITLE	SCALE
APPROVED	MD	CROSSTUBE ASSEMBLY (412 HI AFT)	NTS
DE APPR.	TH	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	09.09.30		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

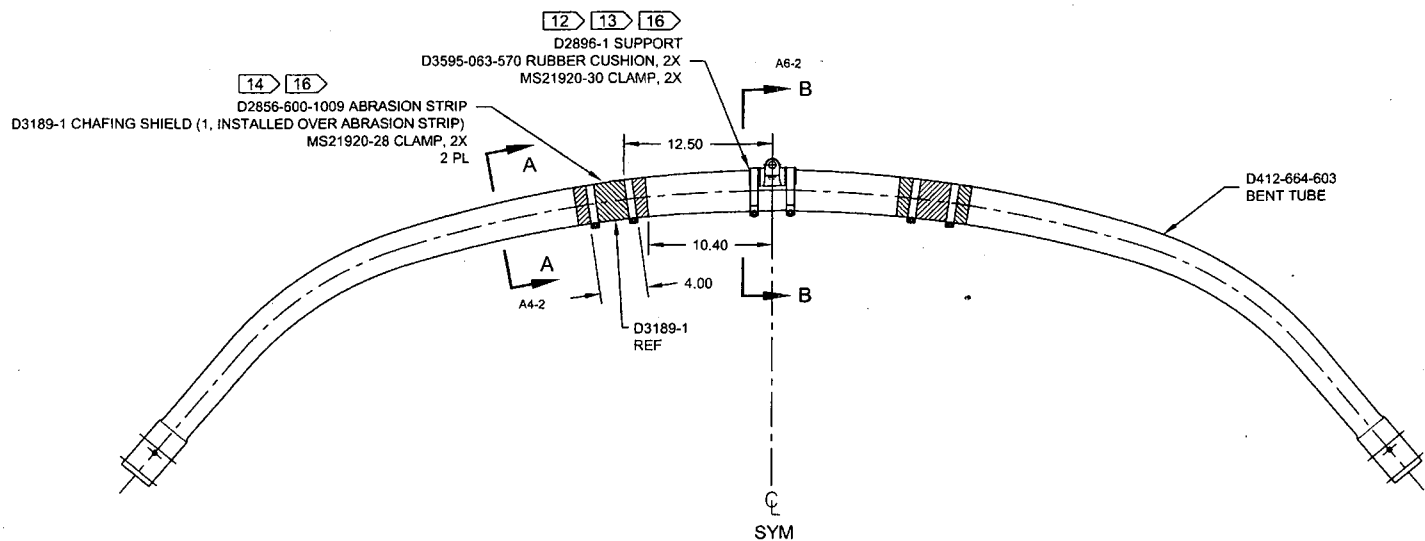
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

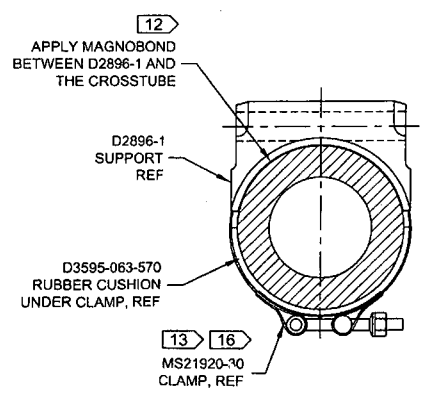
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

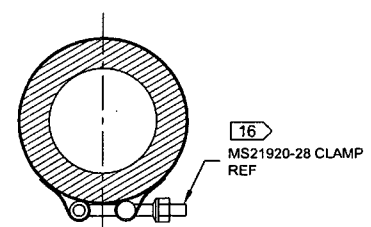
76350



D212-664-243
ASSEMBLY DETAIL



SECTION B-B D4-2
SCALE 4X



SECTION A-A C6-2
SCALE 4X

2 DEO ATTACHED

RELEASED
2009-10-29
MK

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	Q	DRAWING NO.	REV. E
MFG. APPR.	S	D412-664-243	SHEET 2 OF 4
APPROVED	AP	TITLE	SCALE
DE APPR.	II	CROSSTUBE ASSEMBLY (412 HI AFT)	NTS
DATE	09.09.30	<small>COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

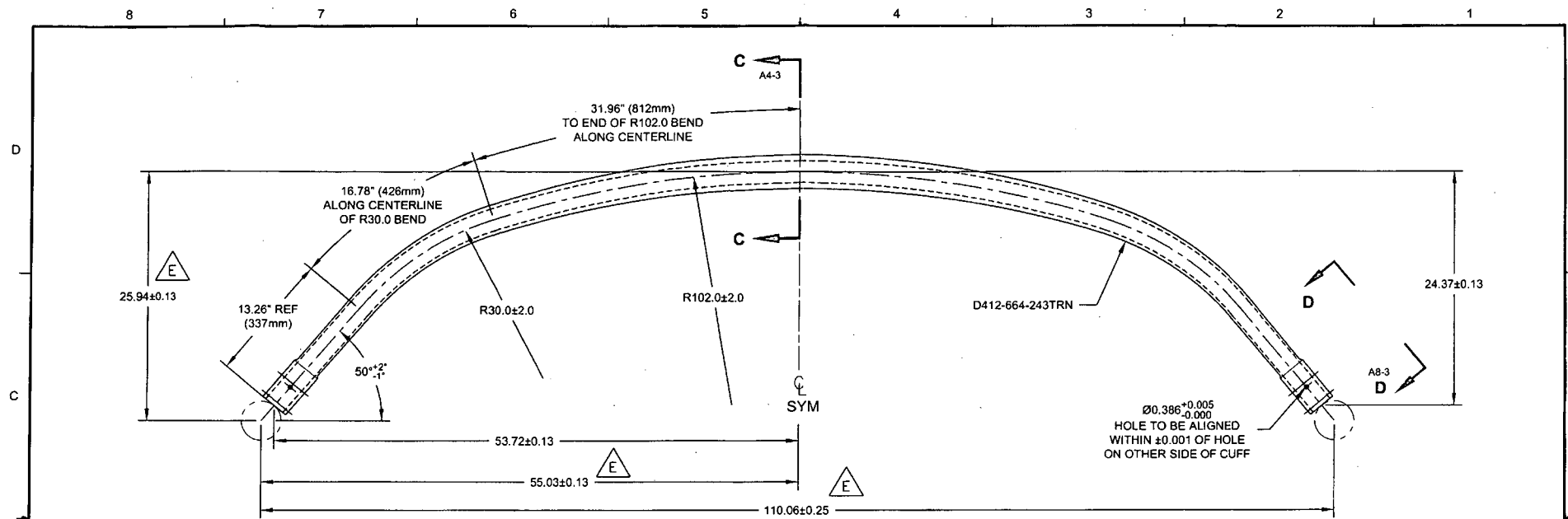
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

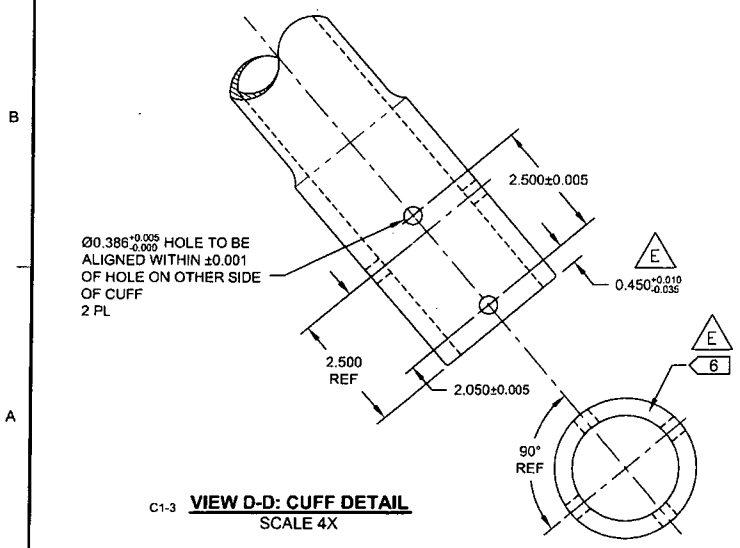
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

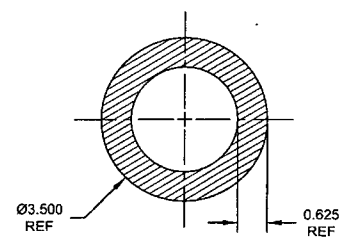
76350



D412-664-603 10
BENDING AND DRILLING DETAIL E



C1-3 **VIEW D-D: CUFF DETAIL**
 SCALE 4X



SECTION C-C D5-3
 SCALE 4X

2 DEO ATTACHED
 RELEASED
 2009-10-29
 MP

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	9	DRAWING NO.	REV. E
MFG. APPR.	SS	D412-664-243	SHEET 3 OF 4
APPROVED	AP	TITLE	SCALE
DE APPR.	4	CROSSTUBE ASSEMBLY (412 HI AFT)	NTS
DATE	09.09.30	COPYRIGHT © 2001 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

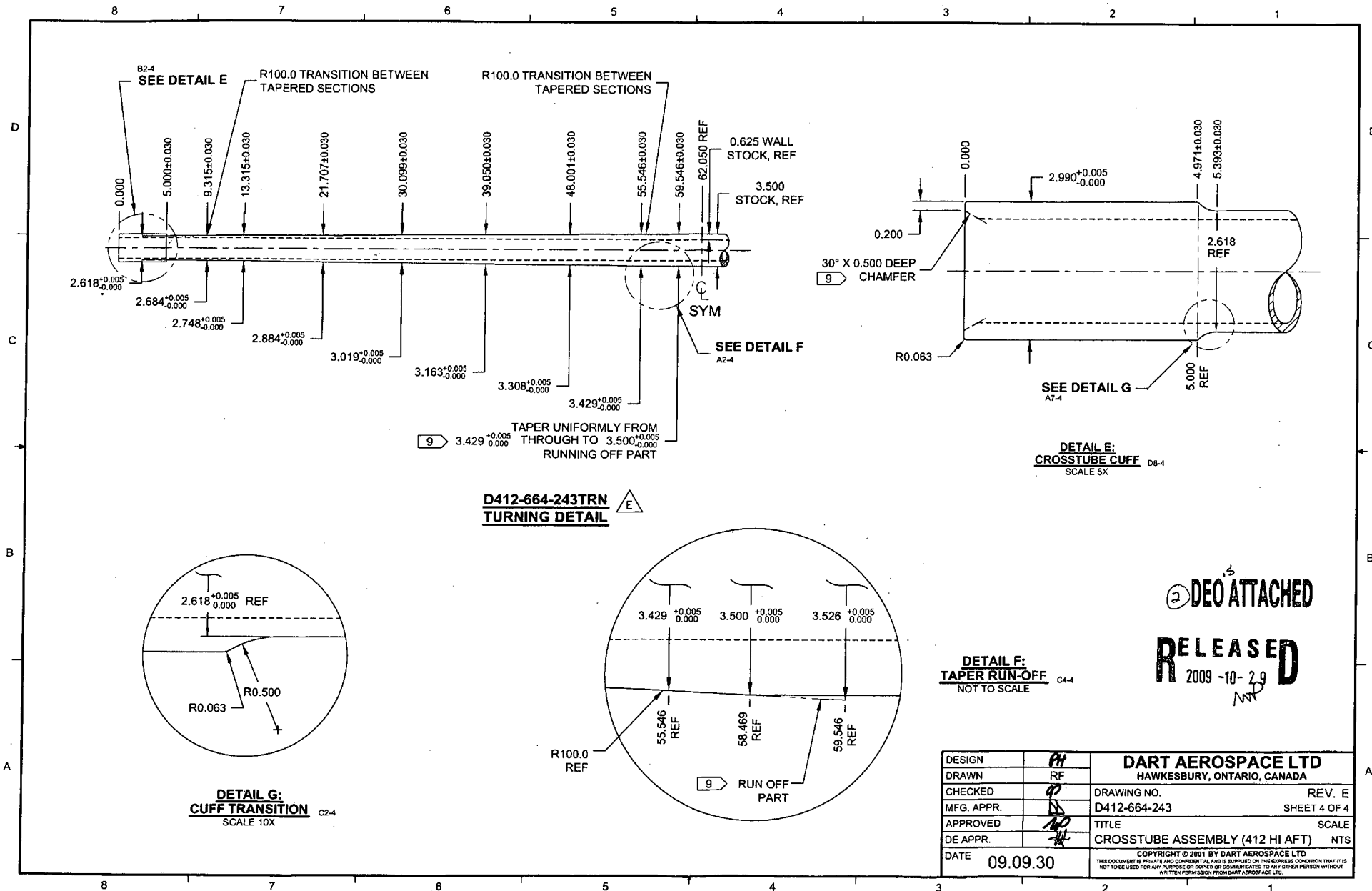
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

76350



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

76350

DRAWING NO. D412-664-243	TITLE CROSSTUBE ASSEMBLY (412 HI AFT)	REV. E	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D412-664-243-E-1	SHEET NO. SHEET 1 OF 2	SCALE NTS
DRAWN	CHECKED	MFG. APPR.	APPROVED		DE APPR.		
DATE 11.03.31	DATE 11/03.31	DATE 11.03.31	DATE 11/03.31		DATE 11.03.31		

PURPOSE:

REMOVED ABRASION STRIP IN FAVOR OF A THIN LAYER OF PROSEAL 890.

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

IS:

Item	Qty -243	Part Number	Description
6	0	D2856-600-1009	ABRASION STRIP

WAS:

6	2	D2856-600-1009	ABRASION STRIP
---	---	----------------	----------------

NOTES 2 AND 14, SHEET 1 ARE AMENDED AS FOLLOWS:

IS:

- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
MASK UNDERSIDE OF CROSSTUBE AS SHOWN (HATCHED AREA)
PAINT OUTSIDE PER DART QSI 005 4.2
AFTER PAINTING, APPLY CLEAR COAT ON HATCHED AREA
- 14) APPLY A THIN COAT OF PROSEAL 890 ON INSIDE CONCAVE SURFACE OF D3189-1
CHAFING SHIELD AND LET CURE PER MANUFACTURER'S INSTRUCTIONS. INSTALL
PROSEALED D3189-1 CHAFING SHIELD ONTO CROSSTUBE BY APPLYING A THIN COAT OF
PROSEAL 890 ONTO CROSSTUBE. BE SURE TO ELIMINATE ANY AIR GAPS.

WAS:

- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 14) INSTALL D2856-600-1009 ABRASION STRIPS WITH A 0.13 REF GAP ON BOTTOM SIDE OF
CROSSTUBE PER QSI 035.

RELEASED
2011-04-03
MB

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

76350

DRAWING NO. D412-664-243	TITLE CROSSTUBE ASSEMBLY (412 HI AFT)	REV. E	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D412-664-243-E-1	SHEET NO. SHEET 2 OF 2	SCALE NTS
DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.		
DATE 11.03.31	DATE 11.03.31	DATE 11.03.31	DATE 11.03.31	DATE 11.03.31		

IS:

D3189-1 CHAFING SHIELD (1, INSTALLED OVER PROSEAL 890)
MS21920-28 CLAMP, 2X
2 PL

WAS:

D2856-600-1009 ABRASION STRIP
D3189-1 CHAFING SHIELD (1, INSTALLED OVER ABRASION STRIP)
MS21920-28 CLAMP, 2X
2 PL

D412-664-603
BENT TUBE

D3189-1
REF

**D412-664-243
ASSEMBLY DETAIL**

RELEASED
2011-04-07
MD

MASK AREA PRIOR TO PAINTING AND
APPLY CLEAR COAT AFTER PAINTING

C
SYM

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

76350

DRAWING NO. D412-664-243	TITLE CROSSTUBE ASS'Y (412 HI AFT)	REV. E	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D412-664-243-E-2	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>qp</i>	CHECKED <i>ASS</i>	MFG. APPR. <i>RE</i>	APPROVED <i>MP</i>		DE APPR. <i>#</i>		
DATE 11.09.07	DATE 11.09.19	DATE 11.09.19	DATE 11.09.19		DATE 11.09.19		

PURPOSE:

REPLACE MAGNOBOND WITH 3M DP460 SCOTCH-WELD EPOXY ADHESIVE

CHANGE:**IS:**

Item	Qty -243	Part Number	Description
9	A/R	SCOTCH-WELD DP460	EPOXY ADHESIVE, 3M SCOTCH-WELD

WAS:

9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)
---	-----	----------------	---------------------------------------------------------------------------------------------------------------

NOTE 12 & 16, SHEET 1 IS AMENDED AS FOLLOWS:

IS:

- 12) INSTALL D2896-1 CENTER SUPPORT USING A 0.04" TO 0.07" THICK LAYER OF SCOTCH-WELD DP460 PER QSI 015. LET CURE FOR 24 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 16) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. **PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER ADHESIVE HAS CURED FOR 24 HOURS.**

WAS:

- 12) INSTALL D2896-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2896-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 16) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED
2011-09-29
MP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

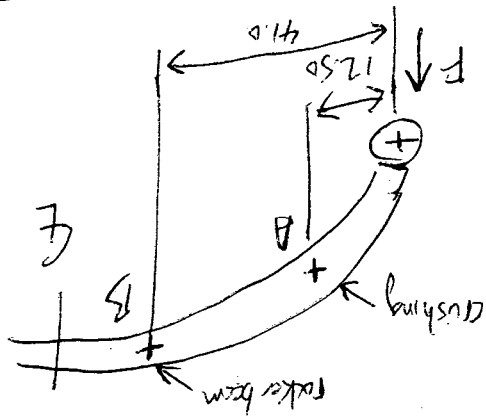
NOTE: Date & initial all entries

0412-464-203 B.M. 76350 & 76351

Worst case torsion: $OD1 = 2.666$ $OD2 = 2.979$
 Wall = 0.303 (inside band)
 0.290 (outside band)
 0.294 (side)
 0.250 (side)
 Crushing = 6.7%

$I = 1.628$ (from AutoCAD) $L = 1.303$

Compared to point of contact of rocker beam.
 $O.D. = 3.309$ $ID = 2.25$
 $I = 4.627$ $L = 1.654$



$F = M/L/I$

$A_0 = F \times 12.5 \times 1.303 = 10.0 \times F$

$B = F \times 41.0 \times 1.654 = 14.65 \times F$

4.627

$M.S. = \frac{14.65}{10.0} - 1 = 0.46$

MARGIN OF SAFETY STILL POSITIVE. TUBE WILL FAIL AT
 ROCKER BEAM BEFORE AREA OF CRUSHING. ACCEPTABLE

11.11.23

Chris Provencal

From: David Shepherd <dshepherd@dartaero.com>
Sent: Wednesday, November 23, 2011 12:53 AM
To: 'Chris Provencal'
Cc: 'Mike Petsche'
Subject: RE: NCR D412-664-203

Big sigh ... My recollection is that max crushing is 6%, so we are just over the limit ... Suggest you draw up the modified section and calculate M_c/I based on max landing gear loading of about 22,000 lb so we can see where we are at from a stress point of view. It's 412 aft, so we need to be real sure about this. I assume the tubes are concentric because if not, we might as well cut them up right now.

David

From: Chris Provencal [<mailto:cprovencal@dartaero.com>]
Sent: November-22-11 8:55 AM
To: David Shepherd
Cc: Mike Petsche
Subject: NCR D412-664-203

David,

We have two D412-664-203 xtubes. The max crushing is in the range of 6.4% to 6.7% for both tubes, on both sides. The area of heavy crushing is about 18" up from the cuff, near the end of the 30" rad. It transitions up to about 4% crushing a few inches above this, with the crushing being about 2% crushing in the top bend. The attached picture illustrates the location. Is this acceptable?

-Chris





RAPPORT D'INSPECTION PAR RESSUAGE

P-11200

PAGE 1 DE 2

CLIENT

ATTENTION

ADRESSE

PROJET

ITEM(S) EXAMINÉ

DATE

N° TRAVAIL
ACUREN

N° CLIENT POWO

SITE DE TRAVAIL

ACCEPTATION STD.

HEURE

AM ☒ PM ☐

DATE/RÉV.

DESCRIPTION DES TRAVAUX

N° PROCÉDURE

LT-002

DATE/RÉV.

N° TECHNIQUE

LT-002

DATE/RÉV.

N° ITEMS

DESCRIPTION

MATÉRIEL

ÉPAISSEUR

DÉTAILS DES INSPECTIONS

MÉTHODE :	<input checked="" type="checkbox"/> FLUORESCENT	<input type="checkbox"/> VISIBLE	<input type="checkbox"/> LAVABLE À L'EAU	<input type="checkbox"/> MÉTHODE DISSOLVANT	<input type="checkbox"/> PRÉ-ÉMULSIONNANT	
MARQUE :	Dunlop		LUM. NOIRE S/N 16460	<input checked="" type="checkbox"/> PUISS. > 1000 µ W/CM²	<input type="checkbox"/> AMBIANT < 2 fc	
PÉNÉTRANT : Zn-21	TEMPS PÉNÉTRATION MIN.	10 MIN.	ÉQUIP. LUMIÈRE	<input type="checkbox"/> LAMP. POCHE	<input type="checkbox"/> LAMP. CULASSE	<input type="checkbox"/> PUISS. > 100 fc @ SURFACE
DISSOLVANT PÉNÉTRANT ISO	TEMPS SÉCHAGE MIN.	> 10 MIN.	AUTRES LABLOC			
RÉVÉLATEUR ISO	TEMPS PÉNÉTRATION MIN.	10 MIN.	MÈTRE LUM. N/S	DATE CAL DUE		
TYPE RÉVÉLATEUR	<input checked="" type="checkbox"/> NON AQUEUX	<input type="checkbox"/> AQUEUX	<input type="checkbox"/> SEC			

SURFACE INSPECTÉE

CONDITION SURFACE	<input type="checkbox"/> MEULÉE	<input type="checkbox"/> SOUDÉE	<input type="checkbox"/> MACHINÉE	<input type="checkbox"/> GRENAILLÉE	<input type="checkbox"/> MÉTAL PROPRE
TEMPÉRATURE SURFACE	<input type="checkbox"/> < - 4°C / 20°F	<input type="checkbox"/> - 4°C / 20°F DE 10°C / 50°F	<input checked="" type="checkbox"/> 10°C / 50°F DE 52°C / 125°F	<input type="checkbox"/> > 52°C / 125°F	

RÉSULTATS-

☐ MÉTRIQUE ☐ IMPÉRIAL

3 x Crapstubes (see other ✓ sheet for item)	No linear indication no fault
1 x Rappel (see other ✓ sheet for item)	No linear indication no fault

FTJ 11-11-28

Étendue des Services

L'entente selon laquelle le Groupe Acuren Inc. exécute les services ne concerne que les énoncés par écrit. En aucune circonstance ces services ne s'étendent au-delà de l'exécution des services demandés. Il est entendu que toutes les descriptions, les observations et les expressions d'opinions faites par Acuren reflètent les opinions ou les observations de l'entreprise fondées sur l'information et les hypothèses fournies par le propriétaire/opérateur, et elles ne constituent pas des déclarations ou des garanties ou ne peuvent être interprétées comme constituant. Le Groupe Acuren Inc. n'assume aucune des responsabilités du propriétaire/opérateur, et le propriétaire/opérateur conserve la responsabilité entière des décisions prises en matière d'ingénierie, de fabrication, de réparation et d'usage à partir de l'information ou des données fournies par Acuren en rapport avec les services décrits dans les présentes ne peuvent excéder le coût des services rendus.

Norme de Diligence

Dans l'exécution des services, le Groupe Acuren Inc. applique le degré de diligence, le soin et la compétence normalement exercés dans des circonstances semblables par d'autres fournisseurs de ce type de services opérant dans la même localité ou dans une localité similaire. Aucune autre garantie, implicite ou explicite, n'est faite ou voulue par le Groupe Acuren Inc.

SIGNATURES

REPRÉSENTANT	MOULÉ	SIGNATURE	FTJ#	
TECHNICIEN (SIGNATURE):			RAPPORT	
NOM (MOULÉ):			RÉVISÉ PAR:	
	1 ^{ER} TECHNICIEN	2 ^{ÈME} TECHNICIEN	NOM	INITIALES
ONGC NIVEAU	2	SNT NIVEAU	2	
ONGC N° REG.	12265	ONGC N° REG.		



RAPPORT D'ESSAI NON DESTRUCTIF

(SUITE)

RAPPORT #

R-11200

PAGE 2 DE 2

CLIENT	Dart Aircraft	DATE	Novembre 25 th 2011	HEURE	<input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
ATTENTION	Yves Linda Lacelle	NO. TRAVAIL ACUREN	188-11-0768		
RÉSULTATS	<input type="checkbox"/> METRIQUE <input type="checkbox"/> IMPÉRIAL				

Aluminium crosstubes:

1	work order	ID	75804 (crosstube bow)	Item ID	D 212-664-205
2	"	"	75803	"	"
3	"	"	75351 (crosstube AFT)	"	D 412-664-205
4	"	"	76350	"	"
5	"	"	75804 (crosstube bow)	"	D 212-664-205
6	"	"	76370	"	"
7	"	"	76369	"	"

Aluminium Rappel:

8	work order	ID	76101 (Rappel)	Item ID	D3011-1
---	------------	----	----------------	---------	---------

R-11-1128

Étendue des Services

L'entente selon laquelle le Groupe Acuren Inc. exécute les services ne concerne que les énoncés par écrit. En aucune circonstance ces services ne s'étendent au-delà de l'exécution des services demandés. Il est entendu que toutes les descriptions, les observations et les expressions d'opinions faites par Acuren reflètent les opinions ou les observations de l'entreprise fondées sur l'information et les hypothèses fournies par le propriétaire/opérateur, et elles ne constituent pas des déclarations ou des garanties ou ne peuvent être interprétées comme constituant. Le Groupe Acuren Inc. n'assume aucune des responsabilités du propriétaire/opérateur, et le propriétaire/opérateur conserve la responsabilité entière des décisions prises en matière d'ingénierie, de fabrication, de réparation et d'usage à partir de l'information ou des données fournies par Acuren en rapport avec les services décrits dans les présentes ne peuvent excéder le coût des services rendus.

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SIGNATURES

REPRÉSENTANT
À LA CLIENTÈLE

Ben Tillet

MOULÉE

SIGNATURE

TECHNICIEN (SIGNATURE)

NAME (MOULÉE):

PIERRE LUC DUBOIS

1^{er} TECHNICIEN

2^e TECHNICIEN

NIVEAU CGSB

2

NIVEAU SNT

2

NIVEAU CGSB

NIVEAU SNT

No. ENREG. CGSB

12805

No. ENREG. CGSB

FTJ #:

RAPPORT
REVISÉ PAR:

NOM

INITIALES

Location/Lot Activity

Thursday, March 29, 2012 12:36:44 PM

Page 1 of 3

Criteria : All Items All Locations Lot: 71502 All Transaction Types All Dates Report on Locations & Lots

Transaction Type	Item ID/ Item Name	Warehouse Location ID	Reason	Employee ID Location Code	Loc Trans Date	LocQtyPrior/ Location Qty	Lot Number	LotQtyPrior/ Lot Qty	Shelf Life Date Lot Code	Extended Cost
Account Value Change	D2896-1 / Support	Main Warehouse		FAUT01		20.0000		20.0000		
		LG			10/19/2011	-20.0000	71502	-20.0000		(\$6,397.93)
		Main Warehouse		FAUT01		20.0000		20.0000		
		LG			10/19/2011	20.0000	71502	20.0000		\$6,397.93
								0.0000		\$0.00
Inv Adjustment	D2896-1 / Support	Main Warehouse	Found	FAUT01		21.0000		0.0000		
		LG053			3/7/2012	1.0000	71502	1.0000		\$319.90
		Main Warehouse	Found	FAUT01		21.0000		0.0000		
		LG053			3/7/2012	1.0000	71502	1.0000		\$319.90
		Main Warehouse	B/N correction	GOLD01		21.0000		0.0000		
		LG053			3/23/2012	1.0000	71502	1.0000		\$319.90
		Main Warehouse	B/N correction	GOLD01		21.0000		0.0000		
		LG053			3/27/2012	1.0000	71502	1.0000		\$319.90
								4.0000		\$1,279.59
Issue	D2896-1 / Support	Main Warehouse	73691	QUIR01		20.0000		20.0000		
		LG			10/19/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	73690	QUIR01		19.0000		19.0000		
		LG			10/19/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	75417	QUIR01		18.0000		18.0000		
		LG			11/9/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	75416	QUIR01		17.0000		17.0000		
		LG			11/9/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	74376	FAUT01		16.0000		16.0000		
		LG			11/21/2011	-1.0000	71502	-1.0000		(\$319.90)

Transaction Type	Item ID/ Item Name	Warehouse Location ID	Reason	Employee ID Location Code	Loc Trans Date	LocQtyPrior/ Location Qty	Lot Number	LotQtyPrior/ Lot Qty	Shelf Life Date Lot Code	Extended Cost
Issue	D2896-1 / Support	Main Warehouse	74377 -203	FAUT01		15.0000		15.0000		
		LG			11/21/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	76351 -203	DESJ02		35.0000		14.0000		
		LG053			12/6/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	76350 -203	DESJ02		34.0000		13.0000		
		LG053			12/6/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77108 -203	DESJ02		33.0000		12.0000		
		LG053			12/9/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77273 -203	LAVO01		32.0000		11.0000		
		LG053			12/9/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77109 -203	DESJ02		31.0000		10.0000		
		LG053			12/13/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77433	QUIR01		30.0000		9.0000		
		LG053			12/19/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77434	QUIR01		29.0000		8.0000		
		LG053			12/20/2011	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77748	FAUT01		28.0000		7.0000		
		LG053			1/6/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77533	FAUT01		27.0000		6.0000		
		LG053			1/6/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	77534	FAUT01		26.0000		5.0000		
		LG053			1/6/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	78576	FAUT01		25.0000		4.0000		
		LG053			2/22/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse	78574	FAUT01		24.0000		3.0000		
		LG053			2/22/2012	-1.0000	71502	-1.0000		(\$319.90)

Issued
 71502
 11/10/13
 11/10/19
 74465

Transaction Type	Item ID/ Item Name	Warehouse Location ID	Reason	Employee ID Location Code	Loc Trans Date	LocQtyPrior/ Location Qty	Lot Number	LotQtyPrior/ Lot Qty	Shelf Life Date Lot Code	Extended Cost
Issue	D2896-1 / Support	Main Warehouse LG053	78575	FAUT01		23.0000		2.0000		
					2/22/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse LG053	78573	GOLD01		22.0000		1.0000		
					2/24/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse LG053	80135	FAUT01		22.0000		1.0000		
					3/7/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse LG053	80134	FAUT01		22.0000		1.0000		
					3/7/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse LG053	80585	GOLD01		22.0000		1.0000		
					3/23/2012	-1.0000	71502	-1.0000		(\$319.90)
		Main Warehouse LG053	80584	GOLD01		22.0000		1.0000		
					3/27/2012	-1.0000	71502	-1.0000		(\$319.90)
									-24.0000	(\$7,677.51)
Loc Transfer	D2896-1 / Support	Main Warehouse LG053		GOLD01		0.0000		0.0000		
					11/30/2011	14.0000	71502	14.0000		\$4,478.55
		Main Warehouse LG		GOLD01		14.0000		14.0000		
					11/30/2011	-14.0000	71502	-14.0000		(\$4,478.55)
									0.0000	\$0.00
WIP Receipt	D2896-1 / Support	Main Warehouse LG	71502	GOLD01		0.0000		0.0000		
					10/3/2011	20.0000	71502	20.0000		\$6,397.93